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CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

STATE OF CALIFORNIA

In the Matter of HEARING BEFORE THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD RE: CLEANUP AND ABATEMENT ORDER No. R5-2009-XXXX Issued to: BAILEY MINERALS CORPORATION, TERHEL FARMS, INC., MAGMA POWER COMPANY, CORDERO MINING COMPANY, RICHARD L. MILLER, HOLIDAY FOUNDATION INC., SUNOCO ENERGY DEVELOPMENT COMPANY, HOMESTAKE MINING COMPANY, BONNEVILLE INDUSTRIES, INC., FILIATRA, INC., ASERA WESTERN CORPORATION, AMERICAN LAND CONSERVANCY	CAO R5-2009-XXXX SUNOCO, INC.'S SUBMISSION OF EVIDENCE AND POLICY STATEMENT PER PROPOSED DRAFT HEARING PROCEDURES FOR CLEANUP AND ABATEMENT ORDER R5-2009-XXXX Hearing Date: October 7, 8, & 9, 2009 Time: 8:30 a.m. Location: 11020 Sun Center Drive Suite 200 Rancho Cordova, CA

I. INTRODUCTION

In accordance with the Proposed Draft Hearing Procedures For Cleanup And Abatement Order R5-2009-xxxx ("Hearing Procedures"), Sunoco, Inc. ("Sunoco"), without admitting any legal liability for Cordero Mining Company ("Cordero") and Sunoco Energy Development Company ("SEDC"), hereby submits its Evidence and Policy Statement ("Statement") on behalf of these corporate entities with respect to any liability they may have related to the geothermal exploration leases referenced in the June 10, 2009 Revised Draft Cleanup And Abatement Order No. R5-2009-XXXX, Central, Cherry Hill, Empire, Manzanita, And West End Mines, Colusa County, ("Draft Order" or "DO"), issued by the California Regional Water Quality Control Board, Central Valley Region ("Regional Board"). The Draft Order improperly names Cordero and SEDC as "dischargers" based on inapplicable State Water Resources Control Board ("State Board") precedent and provisions of California Water Code ("CWC") sections 13267 and 13304, and Sunoco herein requests that Cordero and SEDC be removed from the Draft Order.

In accordance with the Hearing Procedures, this Statement includes the following: (1) all evidence (other than witness testimony to be presented orally at the hearing) that Sunoco would like the Regional Board to consider; (2) all legal and technical arguments or analysis; (3) the name of each witness, if any, whom Sunoco intends to call at the hearing, the subject of each witness' proposed testimony, and the estimated time required by each witness to present direct testimony, and; (4) the qualifications of each expert witness.

Sunoco's request that Cordero and SEDC be removed from any future orders arises from: (1) Cordero and SEDC held geothermal leases – the terms of which did not allow for any activity unrelated to geothermal exploration or production – but never owned or operated any mine site at issue; (2) the Prosecution Teams' reliance on In the Matter of the Petition of Zoecon Corporation, Order No. WQ 86-02, and In the Matter of the Petitions of Wenwest, Inc. et al, Order No. WQ 92-13 is misplaced, as neither order applies to lessees and instead support the *removal* of Cordero and SEDC from the Draft Order; (3) lessees are not liable for continuing nuisances under California Civil Code §3483; (4) under analogous federal law, neither Cordero nor SEDC can be considered an owner or operator of the mine sites at issue; (5) CWC §§ 13267 and 13304 are inapplicable to non-discharger lessees such as Cordero and SEDC; (6) the Regional Board's admission that beneficial uses of municipal and domestic supply ("MUN") and the human consumption of aquatic organisms do not exist and are not attainable in Sulphur Creek due to natural sources of mercury and salts; and, (7) removal of Cordero and SEDC from

the Draft Order is appropriate given the recent removal of similarly situated potentially responsible parties ("PRPs") based on the Regional Board's inability to attribute legal responsibility to them regarding the Elgin Mine Site draft Cleanup and Abatement Order.

II. Legal Argument & Technical Analysis

A. The Order Wrongly Identifies Cordero and SEDC As Former Owners and/or Operators Of The Mine Sites.

The Draft Order's identification, in Finding No. 5, that "[a]ll the parties named in this order *either owned the site* at the time when a discharge of mining waste into waters of the state took place, *or operated the mine*, thus facilitating the discharge of mining waste into waters of the state" is incorrect and fundamentally unfair as to Cordero and SEDC, which never owned or operated any mine site at issue. (DO at p. 2; emphasis added.) The Prosecution Team's "Board Evidence Document" ("Evidence Document") echoes this error, stating, ". . . Cordero [] and [SEDC][] should not be allowed to disclaim their responsibility for managing the wastes during the time of their *ownership* once their exploration proved fruitless." (Emphasis added.) Neither entity conducted any mercury mining at any site identified in the Draft Order. (See generally, Cordero and SEDC geothermal leases referenced in Attachment B of the Evidence Document.) The leases were limited in scope, only allowing Cordero and SEDC to drill exploratory geothermal wells. (Id.)

For example, the terms of the June 3, 1965 lease agreement ("June 3 Lease") that Magma Power Company assigned to Cordero only allowed:

> ". . . the sole and exclusive right to Lessee to explore for, (by such methods as it may desire), drill for, produce, extract, remove and sell steam and steam power and extractable minerals[1] from, and utilize, process, convert and otherwise treat such steam and steam power upon, said land, and to extract any extractable materials, during the term hereof, with the right of entry thereon and use and occupancy thereof at all time for said purposes of and the furtherance thereof, including the right to construct, use and maintain thereon and to remove therefrom structures, facilities and installations, pipe lines, utility lines, power and transmission lines." (See June 3 Lease, attached hereto as Exhibit A, at p. 1.)

Moreover, under the June 3 Lease, the Lessor reserved the right:

"to use and occupy said land, or to lease or otherwise deal with the same, without

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[1] Section 17 (d) of the June 3 Lease defines "extractable minerals" as "any minerals in solution in the well effluence, and minerals or gasses produced from or by means of any well or wells on the leased land or by means of condensing steam or processing water produced from or the effluence from any such well or wells."

> interference with Lessee's rights, for residential, agricultural, commercial, horticultural, or grazing uses, or for mining of minerals lying on the surface of or in vein deposits on or in said land, or for any and all uses other than the uses and rights permitted to Lessee hereunder." (Id. at pp. 1-2.)

Section 4 of the June 3 Lease further restricted Cordero's use of the land, providing only the right to drill wells and requiring that:

> ". . . Lessee shall utilize for such purpose or purposes only so much of the leased land as shall be reasonably necessary for Lessee's operations and activities thereon and shall interfere as little as reasonably possible with the use and occupancy of the leased land by Lessor." (Id. at p. 4, Sec. 4.)

Not only did the June 3 Lease specifically limit Cordero's area of operation on the site, it *prohibited* Cordero from engaging in any activity (including the investigation/remediation of alleged mercury contamination) not related to geothermal exploration. The Regional Board offers *no evidence* that Cordero and SEDC engaged in any activity unrelated to geothermal exploration. Thus, the Prosecution Team's Evidence Document submitted in support of the Draft Order, makes the factually and legally unsupported allegation that "Cordero [] and [SEDC], by leasing portions of the property where mining waste piles were present, took responsibility for appropriately managing the discharges from these waste piles to the extent that their lease gave them the ability to do so." The June 3 Lease speaks for itself and reveals that Cordero *could not have* taken such responsibility. (See Exhibit A.) Similarly, the Evidence Document makes the erroneous allegation that Cordero and SEDC "controlled" the parcels where the waste piles were present. This contradicts the plain language of the geothermal leases. (Id.; see also leases referenced in Attachment B of the Evidence Document.) As a result, Sunoco requests that the Regional Board amend the Draft Order, removing Cordero and SEDC as respondents, since they were not "dischargers." Otherwise, Sunoco will pursue all legal remedies, including but not limited to the filing of a Petition for Review and a Petition for Stay of Action with the State Water Resources Control Board.

B. In the Matter of the Petition of Zoecon Corporation, Order No. WQ 86-02, and In the Matter of the Petitions of Wenwest, Inc. et al, Order No. WQ 92-13, May Apply To Owners In Some Instances But Never To Lessees.

The Prosecution Team's Evidence Document cites the State Water Resource Control Board decisions In the Matter of the Petition of Zoecon Corporation, Order No. WQ 86-02 ("Zoecon"), and In the Matter of the Petitions of Wenwest, Inc. et al, Order No. WQ 92-13 ("Wenwest"), which purportedly support the allegation that "[][t]he []State Board[] has

determined that, in addition to the initial release of pollutants into the environment, the passive release of pollutants is considered a 'discharge' of waste for the purposes of determining liability under CWC section 13304." These orders, however, only apply and attribute liability to site *owners*, but not mere lessees such as Cordero and SEDC. As a result, the Prosecution Team has not met its burden of showing that Cordero or SEDC have any legal liability under a passive migration/continuing nuisance theory. It is well-established that "[t]he Porter-Cologne Act [] appears to be harmonious with the common law of nuisance." (City of Modesto Redevelopment Agency v. Superior Court, 119 Cal.App.4th 28, 370 (2004).)

Under Zoecon and Wenwest, a *current owner* may face liability because it has the authority to abate a continuing nuisance resulting from the passive migration of contaminants, even where caused by a predecessor owner. However, nothing in either decision supports a finding of liability for *former lessees* such as Cordero and SEDC, which neither caused the continuing nuisance nor have any current authority to abate it.

In Zoecon, the Regional Board concluded that the petitioner, the current site owner, was legally responsible for conducting the required investigation or remedial action. (Zoecon at p. 2.) The State Board based its decision on a passive migration, continuing nuisance theory, stating:

> "Therefore we must conclude that there is an actual movement of waste from soils to ground water and from contaminated to uncontaminated ground water at the site which is sufficient to constitute a "discharge" by the petitioner for purposes of Water Code §13263(a)." (Zoecon at p. 4.)

Water Code §13263(a) provides:

> "(a) The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge, except discharges into a community sewer system, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241." (CWC §13263(a).)

Zoecon also states, "...here the waste discharge requirements were imposed on Zoecon not because it had 'deposited' chemicals on to land where they will eventually 'discharge' into state waters, but *because it owns contaminated land which is directly discharging chemicals into water*." (Zoecon at p. 5; emphasis added.) Similarly, in Zoecon the Regional Board made the "determination that *property owner is a discharger for purposes of issuing waste discharge*

requirements when wastes continue to be discharged from a site into waters of the state." (Id.; emphasis added.)

Later, Zoecon states, in explaining why a New Jersey court's conclusion regarding application of the common law nuisance doctrine would probably not be applied by a California court, that, "[t]his is because California Civil Code §3483 provides that every successive ***owner*** of property who neglects to abate a continuing nuisance upon, or in the use of, such property, created by a former owner, is liable therefore in the same matter as the one who first created it." (Zoecon at p. 10; emphasis added). Zoecon acknowledged that "[c]ommon law governs in California only to the extent that it has not been modified by statute." (Id. at p. 10, fn 6.) In this regard, Zoecon recognized that the California legislature specifically excluded lessees from liability in codifying nuisance law, since Civil Code §3483 only applies to "owners," and not lessees. Thus, Zoecon does not apply to lessees Cordero and SEDC, and the Regional Board must remove them from the draft Order and any future orders related to the sites at issue.

The Prosecution Team's reliance on Wenwest is also misplaced, as that matter attributed liability to former and current owners. There, while some of the former site owners were at one time lessees, the State Board did not base cleanup liability on their former lessee status. Instead, the State Board relied on the precedent of a prior order (Petition of John Stuart, Order No. WQ 86-15) to apply a three-part test to "*former owners*" to determine whether a predecessor acted in such a way as to obligate participation in the cleanup: "(1) did they have a significant ownership interest in the property at the time of the discharge?; (2) did they have knowledge of the activities which resulted in the discharge; and (3) did they have the legal ability to prevent the discharge." (Wenwest at p. 4.) The Wenwest decision attributed liability to former owners only upon finding affirmative answers to all three questions. More significantly, in Wenwest, the State Board removed PRP Wendy's International ("Wendy's"), *a former site owner*, from the cleanup order upon recognizing that "[n]o order issued by this Board has held responsible for a cleanup a former landowner who had no part in the activity which resulted in the discharge of the waste and whose ownership interest did not cover the time during which that activity was taking place." (Wenwest at p. 5.)

The State Board also based its decision to remove Wendy's in part on the fact that "the gasoline was already in the ground water and the tanks had been closed prior to the brief time Wendy's owned the site." Here, the alleged mercury contamination of concern either was already in Sulphur Creek due to naturally occurring discharges (see discussion below) or

mercury mining activity that took place long before Cordero and SEDC entered into their geothermal leases. Moreover, Wendy's was "told about the pollution...but took no steps to remedy the situation. On the other hand, they did nothing to make the situation any worse." (Id.) Here, the Prosecution Team offers no evidence that Cordero or SEDC knew about the pollution or "did [anything] to make the situation any worse." The Prosecution Team suggests in the Evidence Document only that Cordero/SEDC had the "ability to control" the alleged discharge during the leasehold. It offers no evidence that these entities developed any road (which may have predated the leasehold), or that construction of a geothermal drilling pad could have made the situation any worse.

In summary, applying the considerations the State Board addressed in removing Wendy's in Wenwest supports removal of Cordero and SEDC from the Draft Order here:

- Cordero/SEDC leased the site specifically for geothermal exploration;
- The Cordero/SEDC leaseholds were limited in scope and short in duration;
- The current site owner is named in the Draft Order;
- No evidence has been offered demonstrating that Cordero/SEDC had anything to do with the activity (mercury mining/naturally occurring background levels) that caused the alleged discharge;
- No evidence has been offered demonstrating Cordero/SEDC engaged in any activity on the site which may have exacerbated the problem;
- No evidence has been offered demonstrating Cordero/SEDC had knowledge of a pollution problem at the site during their leases;
- Cordero/SEDC leased the site(s) in the 1960's and 1970's, prior to the development of TMDL's and/or any other water quality objectives;
- There are several responsible parties who are properly named in the order.

(Cf. Wenwest considerations at pp. 6-7.)

C. Under California Civil Code §3483 Lessees Such As Cordero And SEDC Are Not Liable For Nuisances Created Prior To The Leasehold.

California Civil Code §3483 assesses continuing nuisance liability only upon *owners* and *former owners*, not lessees. The plain language of §3483 reveals that the legislature explicitly excluded lessees from liability for continuing nuisance:

> "Every successive *owner* of property who neglects to abate a continuing nuisance upon, or in the use of, such property, created by a former *owner*, is liable therefor

in the same manner as the one who first created it." (Cal. Civ. Code § 3483; emphasis added.)

Even if the Regional Board were to somehow find that Cordero and SEDC were constructive owners of the site(s) (which they were not), these entities would still not face liability under California law, because it is well-established that ". . . there is no dispute in the authorities that one who was not the creator of a nuisance ***must have notice or knowledge of it before he can be held [liable]***." (Reinhard v. Lawrence Warehouse Co., 41 Cal.App.2d 741 (1940) (emphasis added), citing Grigsby v. Clear Lake Water Works Co., 40 Cal. 396, 407 (1870); Edwards v. Atchison, T. & S. F. R. Co., 15 F.2d 37, 38 (1926).) Moreover, "[i]t is a prerequisite to impose liability against a person who merely passively continues a nuisance created by another that he should have notice of the fact that he is maintaining a nuisance and be requested to remove or abate it, or at least that he should have knowledge of the existence of the nuisance." (Reinhard, supra, at 746.) While Wendy's was a former owner (a fact distinguishing its potential liability from that of lessees Cordero and SEDC), the Wenwest decision *is* analogous here in that the State Board recognized that "[h]ad a cleanup been ordered while Wendy's owned the site, it would have been proper to name them as a discharger. Under the facts as presented in this case, it is not." (Wenwest at p. 6.) Here, the State Board did not order Cordero or SEDC to cleanup while they held leaseholds, thus, it would be improper to name them as a discharger under either the cases listed above *or* the Wenwest decision.

The Prosecution Team's allegation that "an ongoing discharge is and was occurring" (July 16 letter at p. 1) is insufficient to trigger liability on the part of Cordero and SEDC since, in addition to neither having been an owner, no evidence is presented proving that either Cordero or SEDC was on notice of the fact that it was maintaining a nuisance and had been requested to remove or abate it, or that it had knowledge of the existence of the nuisance. Moreover, if the Prosecution Team is now asserting that a nuisance was occurring at the time Cordero and SEDC held the leaseholds, it begs the question as to why the Regional Board did not require investigation or remediation of this alleged nuisance at the time, some 30-40 years ago. If the Regional Board was not aware of the nuisance at the time, there is no reason to believe that a geothermal lessee not engaged in mercury mining had knowledge that a continuing nuisance existed on the leased property.

The Prosecution Team fails to provide any legal or factual basis for the conclusion that either Cordero or SEDC has legal liability as an "owner" and, therefore, a discharger, under a continuing nuisance theory. Thus, the Regional Board's attempt to name Cordero and SEDC as dischargers is unsupported by California law and must be denied.

Even if the Prosecution Team offered any factual or legal bases for liability (which it has not), the Prosecution Team's assertion that liability under CWC section 13304 is "joint and several" is erroneous under the recent United States Supreme Court decision holding that divisibility is appropriate where a party can show a reasonable basis for apportionment. (Burlington Northern & Santa Fe Railway Co. et al. v. United States, (2009) 129 S. Ct. 1870.) In Burlington, neither the parties nor the lower courts disputed the principles that govern apportionment in CERCLA cases, and both the District Court and Court of Appeals agreed that the harm created by the contamination of the Arvin site, although singular, was theoretically capable of apportionment. (Id. at 1881.) Thus, the issue before the Court was whether the record provided a "reasonable basis" for the District Court's divisibility conclusion. (Id.) Despite the parties' failure to assist the District Court in linking the evidence supporting apportionment to the proper allocation of liability, the District Court ultimately concluded that this was "a classic 'divisible in terms of degree' case, both as to the time period in which defendants' conduct occurred, and ownership existed, and as to the *estimated maximum contribution* of each party's activities that released hazardous substances that caused Site contamination." (Id. at 1882; emphasis added.)

Consequently, the District Court apportioned liability, assigning one set of defendants 9% of the total remediation costs. (Id.) The Supreme Court concluded that the facts contained in the record reasonably supported the apportionment of liability, because the District Court's detailed findings made it abundantly clear that the primary pollution at the facility at issue was contained in an unlined sump and an unlined pond in the southeastern portion of the facility most distant from the defendants' parcel and that the spills of hazardous chemicals that occurred on that parcel contributed to no more than 10% of the total site contamination, some of which did not require remediation. (Id. at 1882-3.) Thus, the Supreme Court recognized that ". . . if adequate information is available, divisibility may be established by 'volumetric, chronological, or other types of

evidence,' including appropriate geographic considerations." (Id. at 1883; emphasis added.) Although the evidence adduced by the parties did not allow the court to calculate precisely the amount of hazardous chemicals contributed by the parcel to the total site contamination or the exact percentage of harm caused by each chemical, the evidence did show that fewer spills occurred on the parcel and that of those spills that occurred, not all were carried across the parcel to the sump and pond from which most of the contamination originated. (Id.) Because the District Court's ultimate allocation of liability was supported by the evidence and comported with general apportionment principles, the Supreme Court *reversed the Court of Appeals' conclusion that the defendants are subject to joint and several liability for all response costs arising out of the contamination of the facility.* (Id.)

It is well-established that "litigants may not invoke state statutes in order to escape the application of CERCLA's provisions in the midst of hazardous waste litigation." (Fireman's Fund Insurance Company v. City of Lodi, 303 F.3d 928, 947 n. 15 (9th Cir. 2002).) Similarly, because "[f]ederal conflict preemption [exists] where 'compliance with both the federal and state regulations is a physical impossibility,' or when the state law stands as an 'obstacle to the accomplishment and execution of the full purposes and objectives of Congress'" (Id. at 943), the Regional Board may not – in an attempt to assess joint and several liability – assert any state law provisions that would be inconsistent with Burlington, and applying its holding to the facts outlined herein related to Cordero's or SEDC's *de micromis* geothermal leasehold operations at the sites, apportionment is appropriate and there is no basis for the Regional Board to find Cordero jointly and severally liable for mercury contamination caused by any other discharger based solely on geothermal leases.

D. Analogous Federal Case Law Reflects California Law And Suggests That Cordero and SEDC, Merely By Entering Into Geothermal Leases, Did Not Constructively "Own" Or Otherwise "Operate" Any Mine Site.

In a related and therefore relevant context, federal law reflects the same legal principles as those adopted in the California legislature's codification of nuisance law in Civil Code §3483, and does not support the imposition of liability upon former lessees Cordero and SEDC as "operators" or "owners" under CERCLA.

A. Neither Cordero Nor SEDC Would Be Considered an "Operator" Under CERCLA.

While the draft Order suggests that Cordero and SEDC can be considered "dischargers"

under CWC §§ 13267 and 13304 because of their alleged status as "owners or operators" of the site(s), analogous federal case law applied to the facts of this matter demonstrate that, as to the mine waste at issue here, neither Cordero nor SEDC qualify as either an "owner" or an "operator" with liability for the mine waste. Under federal law, a finding that geothermal lessees Cordero and SEDC were "operators" of the mercury mine would require a showing that they managed, directed, or conducted operations specifically related to the pollution at issue, that is, operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations. (See United States v. Bestfoods, 524 U.S. 51, 66-67 (1998).) Yet, the Prosecution Team offers no evidence that Cordero or SEDC conducted any operations related to the mercury mines or any related materials. Moreover, the terms of the geothermal exploration leases entered into by Cordero and SEDC do not support a finding that Cordero or SEDC were "operators", and several cases support this conclusion. (See, e.g., Nurad Inc. v. Wm. E. Hooper & Sons, Co., et al., 966 F.2d 837, 842 (4th Cir. 1992) (court refused to impose "operator" liability on a lessee of a building for contamination that occurred as a result of leaks from underground storage tanks built by the prior property owner that occurred adjacent to the leased building during the tenant's leasehold); Kaiser Aluminum & Chemical Corp. v. Catellus Dev. Corp., 976 F.2d 1338, 1341-1342 (9th Cir. Cal. 1992) ([R]eiterating the well-settled rule that "operator" liability under section 9607(a) (2) only attaches if the defendant had authority to control the cause of the contamination at the time the hazardous substances were released into the environment; CPC Int'l, Inc. v. Aerojet-General Corp., 731 F. Supp. 783, 788 (W.D. Mich. 1989) ("The most commonly adopted yardstick for determining whether a party is an owner-operator under CERCLA is the degree of control that party is able to exert over the activity causing the pollution.").)

The United States Supreme Court's decision in United States v. Bestfoods, 524 U.S. 51 (1998) clarified the test for "operator" liability as follows:

> [U]nder CERCLA, an operator is simply someone who directs the workings of, manages, or conducts the affairs of a facility. To sharpen the definition for purposes of CERCLA's concern with environmental contamination, an operator must manage, direct, or conduct operations specifically related to pollution, that is, operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations." (United States v. Bestfoods, 524 U.S. 51 at 66-67.)

Here, no evidence is adduced that Cordero and SEDC acted to "manage, direct or conduct" the mercury mining operations that gave rise to the alleged mercury pollution at the

Site such that they could be considered "operators" of the Site. Furthermore, Cordero and SEDC did not have the authority to control any mercury mining waste at the Site, let alone exercise any "actual control" over the Site, such that they should be considered operators. (See generally, leases referenced in Attachment B of the Prosecution Team's Evidence Document.) Indeed, as discussed above, there is no evidence Cordero or SEDC were even aware of any nuisance caused by mercury mining waste at the site(s). Thus, in accordance with the Zoecon and Wenwest decisions and Civil Code §3483 discussed above, and under analogous federal law, Cordero and SEDC cannot and should not should be considered liable as "dischargers" under the California Water Code because, as mere geothermal lessees (pursuing the environmentally beneficial goals of developing renewable energy sources), they could not have arguably become "operators" of the historical mercury mines or mining waste on the Sites.

E. Neither Cordero Nor SEDC Are "Dischargers" Under CWC Sections 13304 and 13267 As A Result of Their Geothermal Leases and Exploration Activities.

Even if there was any mercury mining waste on any of the parcels leased by Cordero or SEDC for geothermal investigation purposes, the Regional Board bases the Order on California Water Code sections 13267 and 13304, which do not create liability for mere geothermal lessees such as Cordero and SEDC. First, the Regional Board has not met the requirement under section 13267[2] of "identifying the evidence that supports requiring [Sunoco] to provide the reports." Merely referencing the facts that Cordero and SEDC held geothermal leases is insufficient to establish that they caused any discharge of any mercury mine wastes.[3] Nor has the Regional Board produced any evidence showing any nexus between Cordero or SEDC and mercury mining activity at any of the sites referenced in the Draft Order. Again, the Regional Board's mere identification of Cordero and SEDC as having held geothermal leases allegedly covering parcels on which former mercury mine wastes allegedly exist does not establish a reasonable or

[2] Section 13267(b)(1) provides in relevant part: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging...waste within its region...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

[3] We also note that the Draft Order is inconsistent and unfair in its treatment of Cordero and SEDC compared with the State of California by the Regional Board, in that it names the former companies as "dischargers" under the Draft Order, but not the State, even though Attachment B to the Draft Order identifies the "State of California (all quicksilver rights)" as a lessee of some of the sites at issue in the Draft Order.

rational basis for concluding, as the Regional Board apparently does, that these entities have "discharged" any mine waste.

Similarly, the Regional Board has not met the requirements of section 13304[4] in naming Cordero and SEDC as "dischargers." As discussed above, the Regional Board has provided no evidence that either Cordero or SEDC conducted any mercury mining activities or otherwise "discharged" any mercury mine waste in connection with the limited geothermal investigation activities they conducted on the properties they leased.

For example, paragraph 3 of the Draft Order focuses on "***[m]ining waste*** [that] has been discharged onto ground surface where it has eroded into Sulphur Creek, resulting in elevated concentrations of metals within the creek…", yet alleges only that "***[t]he Dischargers either own, have owned, or have operated the mining sites*** where Mines are located and where mining waste has been discharged." (DO pp. 2-3; ¶ 3.) Neither Cordero nor SEDC ever owned or "operated" the mining sites at issue. Instead, at most, they only held geothermal leases for short time periods and conducted limited geothermal investigation activities. The Regional Board's Draft Order is therefore without factual basis as it pertains to Cordero and SEDC since it fails to cite to any evidence that Cordero or SEDC "discharged" any of the referenced mercury mining waste. Thus, Sunoco respectfully requests that the Regional Board amend the Draft Order and any subsequent final order to not include Cordero or SEDC.

F. The Draft Order Is Unjustified Because The Regional Board Admits That Added Beneficial Uses Of Sulphur Creek Are Unattainable Due To Natural Sources Of Mercury and Salts.

The Regional Board's March 2007 final staff report proposed an amendment to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan)("Final Staff Report"), which recommended finding that certain beneficial uses are not applicable and establishing site-specific water quality objectives for mercury in Sulphur Creek. The Final Staff Report illustrates that the Draft Order is legally and technically unjustified since it will neither

[4] CWC section 13304(a) provides in relevant part: "Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts…."

enhance the beneficial uses of Sulphur Creek nor result in any measurable benefits that justify the likely cost. (See excerpt from p. i of Final Staff Report, attached hereto as Exhibit B; (complete document located at http://www. waterboards. ca.gov/ centralvalley/water_issues /tmdl/central_valley_ projects/ sulphur_creek _hg/sulphur_creek_staff_final.pdf).)[5]

Specifically, the Draft Order is suspect in light of the Regional Board's admission that Sulphur Creek does not support the MUN beneficial use or the human consumption of aquatic organisms in light of the fact that *naturally occurring concentrations of total suspended solids, mercury, and electrical conductivity exceed drinking water criteria and make Sulphur Creek unsuitable habitat for fish and consumable aquatic invertebrates*. (Id.) Total suspended solids and electrical conductivity also exceed the criteria in Resolution 88-63 for excepting the MUN beneficial use designation for surface and ground waters. (Id.) The Regional Board acknowledges that "[t]hese uses are not existing and cannot feasibly be attained in the future." (Id.)

Because these uses do not exist and are not attainable, none of the promulgated water quality criteria for mercury apply, so the staff's proposal of a "site-specific" water quality objective for mercury in Sulphur Creek based on natural background conditions is inappropriate. Moreover, the setting of site specific water quality criteria that will not establish such beneficial uses violates the requirement of the Porter-Cologne Act that Regional Boards engage in a cost-benefit analysis prior to issuing any cleanup and abatement orders. (See CWC §§ 13263, 13241.) While the California Porter-Cologne Act regulates the discharge of waste into ambient waters and authorizes Regional Boards to impose requirements on waste dischargers, CWC §13263 requires Regional Boards to "take into consideration" the following factors prior to imposing these requirements: "the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of section 13241." (CWC § 13263.) Under section 13241, the six "factors to be considered," include "*economic considerations*" and "*water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality*

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[5] Per the Hearing Procedures, Sunoco submits by reference all evidence and exhibits already in the public files of the Regional Board in accordance with California Code of Regulations, title 23, section 648.3, including all documents, studies and reports, related to the CVRWQCB Sulphur Creek (Colusa County) Mining District Remediation located at: http://www.waterboards.ca.gov/centralvalley/water_issues/mining/sulphur_creek/index.shtml

in the area." (CWC § 13241; emphasis added.)

The Draft Order's requirements that Cordero and SEDC submit a work plan and investigative report related to the "Site" and "mine site" are overly broad, especially given the expense involved in the essentially existential endeavor of remediating a site that cannot be remediated due to naturally occurring conditions.

Moreover, the Draft Order is premature in that it requires investigation and remediation before the Board has proven that there has been a discharge of mercury waste from the Central and Empire mine sites. Paragraph 20 of the Draft Order *estimates* that the mercury load from Central Mine is 0.003 to 0.03 kg/yr or 0.16% of the total mine related mercury load of 4.4 to 18.6 kg/yr to Sulphur Creek. Similarly, paragraph 20 *estimates* that the mercury load from the Empire Mine is 0.04 to 0.06 kg/yr or 0.32% of the total mine related mercury load of 4.4 to 18.6 kg/yr to Sulphur Creek (CalFed Report). This low amount of estimated mercury loading from these sites is likely the result of the good ground cover that has developed over the years. The significant amount of naturally occurring mercury in Sulphur Creek combined with an apparent over-estimation of erosion of mine-tailings contributing mercury to Sulphur Creek indicates that the nature of site conditions remains largely uncertain, and that the Regional Board needs to conduct considerable investigative work – including the assessment of natural or background conditions – prior to determining that there has been any discharge of mercury mine waste at these Sites meriting the assessment of liability for investigation and remediation of the Sites and Sulphur Creek.

The water quality of Sulphur Creek is naturally degraded. The highest concentrations of mercury and dissolved solids in Sulphur Creek are found in water from the natural springs that enter the creek. Mining is not believed to have affected or altered the water quality from the springs (Regional Board, 2007). Further, it has been reported that a major portion of the mercury content in Sulphur Creek is from the naturally occurring springs and that the presence of the mine workings contributes a significantly lesser amount of mercury to the creek. (Final Staff Report.) Therefore, even if the parties made the considerable investment to remediate all of the mine tailings, and it were assumed that all of the mercury contributed by the mines was to be remediated, the overall water quality of Sulphur Creek would remain poor with elevated mercury concentrations based on the naturally occurring background levels. (Id.)

Statements regarding the erosion of the mine tailings as a key source of mercury to Sulphur Creek appear to be overstated as a result of the generalized nature of runoff modeling

previously conducted. Thus, Sunoco requests that the Regional Board conduct investigations of mercury background levels and mine site contribution prior to issuing any final cleanup and abatement order.

G. Sunoco's Witness List, Subject Of Proposed Testimony, Estimated Time Of Testimony, And Qualifications.

In accordance with the Hearing Procedures, Sunoco herein provides the name of each witness, if any, whom Sunoco intends to call at the hearing, the subject of each witness' proposed testimony, the estimated time required by each witness to present direct testimony, and the qualifications of each expert witness.

At the October 7-9, 2009 Hearing, Sunoco may offer the testimony of its retained environmental consultant Andy Zdon, Principal Hydrogeologist with The Source Group, Inc., 3451-C Vincent Road, Pleasant Hill, CA 94523. Mr. Zdon's proposed testimony may reflect the technical discussion outlined above, as well as any other relevant matters pertaining to the Draft Order or the studies and reports concerning the CVRWQCB's Sulphur Creek (Colusa County) Mining District Remediation located at http://www.waterboards.ca.gov/centralvalley/ water_ issues /mining/sulphur_creek/index.shtml (as referenced in f.n. 4, above). Sunoco reserves the right to offer Mr. Zdon's testimony in rebuttal of any argument or technical analysis offered by the Prosecution Team, any other Designated Party, or any Interested Persons (as that term is defined in the Hearing Procedures). Sunoco estimates that any testimony offered by Mr. Zdon will be 5-10 minutes in duration, but reserves the right to exceed this estimated time limit if circumstances so warrant. (Attached hereto as Exhibit C is a true and correct copy of Mr. Zdon's current curriculum vitae.)

Conclusion/Policy Statement.

For the above-stated reasons, the Regional Board's Draft Order and the Prosecution Team's Evidence Document improperly identify Cordero and SEDC as "dischargers" without sufficient legal or factual basis. Moreover, as a matter of policy, it is unfair and inappropriate to penalize entities engaged in the environmentally beneficial activity of pursuing the development of renewable energy resources by attempting to hold them responsible for mining activities as to which there is no evidence they had any connection. Sunoco therefore requests that the Regional Board remove Cordero and SEDC as dischargers from the Draft Order and any subsequent final order.

Reservation of Rights.

Sunoco reserves the right to supplement its Statement with additional legal argument and factual information should the Prosecution Team or any other alleged Discharger or Interested Party introduce new legal or factual argument in a rebuttal response to this Statement.

Respectfully Submitted,

DATED: September 15, 2009

EDGCOMB LAW GROUP

By:  - for -

John D. Edgcomb
jedgcomb@edgcomb-law.com
Attorneys for Sunoco, Inc.

Exhibit A

OFFICIAL RECORDS
COLUSA COUNTY

2269

R 763 8

LEASE AND AGREEMENT

THIS LEASE AND AGREEMENT is made and entered into as of this 3rd day of June, 1965, by and between

BAILEY MINERALS CORPORATION, a Nevada Corporation,
and J. N. WEIGHTMAN

Party (or parties) of the First Part, hereinafter referred to as "Lessor",

and

MAGMA POWER COMPANY, a Nevada corporation, Party of the Second Part, hereinafter referred to as "Lessee".

RECORDED AT REQUEST OF Magma Power Company
DATE Sept. 15, 1965
10 a.m.
332 Official Records p. 586 Colusa County, California
Min. Conf.
$ 14.80
RECORDER

Recitals

Lessor is the owner of certain land situate in Colusa County in the State of California which the parties believe are suited for development and utilization of natural steam and steam power and the earth's natural heat and energy present in or obtainable from said land, for use of such natural steam, natural heat and energy as such or for conversion into electric power or for obtaining extractable minerals therefrom. It is the desire of Lessor and Lessee to enter into an agreement which will enable the development and utilization of said natural steam, and the earth's natural heat and energy, for any of the aforesaid purposes and it is the intention of the parties that Lessee shall have under this Lease and Agreement all rights and power necessary or convenient to carry on the business of developing and utilizing steam and steam power, and, if Lessee deems it warranted, of extracting minerals therefrom. For convenience, the words and phrases "steam", "natural steam", "steam power", "thermal energy", "the earth's natural heat", "the earth's natural energy" and similar words and phrases used in this lease are generally referred to in this instrument as "steam" or as "steam and steam power", and are more specifically hereinafter defined.

Terms of Agreement

FOR AND IN CONSIDERATION OF $14.80 paid to Lessor by Lessee, and other valuable consideration, receipt of which is hereby acknowledged, and in consideration of the covenants and agreements hereinafter contained by the Lessee to be kept and performed, Lessor does hereby grant, lease, let and demise to Lessee, its grantees, successors and assigns, subject to the terms and conditions hereinafter set forth, the land hereinafter described, with the sole and exclusive right to Lessee to explore for (by such methods as it may desire), drill for, produce, extract, remove and sell steam and steam power and extractable minerals from, and utilize, process, convert and otherwise treat such steam and steam power upon, said land, and to extract any extractable minerals, during the term hereof, with the right of entry thereon and use and occupancy thereof at all times for said purposes and the furtherance thereof, including the right to construct, use and maintain thereon and to remove therefrom structures, facilities and installations, pipe lines, utility lines, power and transmission lines. The possession by Lessee of said land shall be sole and exclusive for the purposes hereof and for purposes incident or related thereto, excepting that Lessor reserves the right to use and occupy said land, or to lease or otherwise deal with the same, without interference with Lessee's rights, for residential, agricultural, commercial, horticultural or grazing uses, or for mining of minerals lying on the surface of or in vein deposits on or in said land, or for any and all uses other than the uses and rights permitted to Lessee

hereunder. The land hereby leased is described in Exhibit "A" attached hereto and made a part hereof, including also in the leased land all rights of Lessor, presently owned or hereafter acquired, in and under roads, ditches, and rights of way traversing or adjacent to said land.

The terms and conditions of this lease are as follows, to wit:

1. This lease shall be for a term of twenty-five (25) years from and after the date hereof, and so long thereafter as there is commercial production of steam, or of electric power or of any extractable minerals, derived or produced from the property leased hereunder, and for so long as well, as Lessee is prevented from producing same, or the obligations of Lessee hereunder are suspended, for the causes hereinafter set forth.

2. The initial consideration paid upon execution hereof constitutes rental payable hereunder in advance for 3 years [redacted]. Thereafter, until such time as Lessee shall commence the drilling of a well to test whether sufficient power potential or extractable minerals in commercially paying quantities can be developed on the leased land, [redacted] Upon commencement of the drilling of such well, the obligations of Lessee to pay rental hereunder shall terminate. After commencing the drilling of such well, Lessee shall continue the drilling thereof diligently and in good faith to such depth as Lessee shall deem proper to test whether or not sufficient power potential or extractable minerals in commercially paying quantities can be developed on said land. In the event the first well drilled on the leased land does not indicate or establish to the satisfaction of Lessee sufficient power potential or extractable minerals in commercially paying quantities, Lessee shall either commence the drilling of a second well on the leased land within six (6) months after completion or abandonment of said well (during which said six months' period Lessee shall not be required to pay any rental hereunder), or shall thereafter, commencing upon expiration of said six months' period, pay to Lessor the aforesaid monthly rental, monthly in advance, until such time as the drilling of a second well shall be commenced on the leased land. In the event Lessee shall drill a second well on the leased land to such depth as Lessee shall deem proper to test whether or not sufficient power potential or extractable minerals in commercially paying quantities can be developed on said land, then if such second well does not indicate or establish to the satisfaction of Lessee sufficient power potential or extractable minerals in commercially paying quantities, Lessee shall either commence the drilling of a third well on the leased land within six (6) months after completion or abandonment of said second well (during which said six months' period Lessee shall not be required to pay any rental hereunder), or Lessee shall thereafter, commencing upon expiration of said six months' period, pay to Lessor the aforesaid monthly rental, monthly in advance, until such time as the drilling of a third well shall be commenced on the leased land, and the provisions of this paragraph shall be applicable to such third well and to any and all subsequent wells drilled by Lessee upon the leased land until Lessee shall have drilled and completed a well or wells on the leased land which shall produce or be capable of producing steam of sufficient power potential or extractable minerals in commercially paying quantities. It is expressly understood and agreed by the parties hereto:

(a) That if within three years from the date of this agreement Lessee shall have failed to complete one or more wells on the leased land separately or collectively producing, or being capable of producing, steam of sufficient power potential, as hereinafter defined, or producing, or being capable of producing, extractable minerals of commercial value and in commercial quantities, then Lessor, at its option, may consider such circumstance a default

on the part of Lessee hereunder, except that if on said date Lessee is engaged in drilling a well pursuant to the provisions hereof the time herein provided for shall be extended for the period required by Lessee to complete drilling of said well and for an additional period of six months to test said well to determine whether or not such well separately is or such well together with one or more other wells are capable of producing steam of sufficient power potential, or extractable minerals in commercially paying quantities, and provided further that if such well separately is not or such well together with one or more other wells are not capable of producing steam of sufficient power potential, or extractable minerals in commercially paying quantities, if Lessee within one month after expiration of said six months testing period commences the drilling of another well on the leased land and continues such drilling diligently and in good faith the time herein provided for shall be further extended for the period required by Lessee to complete drilling of said well and to test same for six months, as aforesaid, the provisions hereof being applicable as to each subsequent well which Lessee may elect to drill, until completion on the leased land of one or more wells fulfilling the requirements of this subdivision (a).

(b) That if within six years from the date of this agreement Lessee shall have failed to make or arrange for a bona fide commercial sale or sales of steam, steam power or extractable minerals produced from a well or wells on the leased land then Lessor, at its option, may consider such circumstance a default on the part of Lessee hereunder, it being agreed that if Lessee shall on or before said date enter into an agreement or agreements providing for the purchase of steam for generation of electric power or sale of extractable minerals and providing also for the installation or availability of facilities for such purpose, or purposes, but which such agreement or agreements shall provide that any installation of such facilities shall not be required to be commenced until after an additional period of testing the power potential or commercial character or quantity of extractable minerals of the well or wells on the leased land, or until an additional amount of steam or extractable minerals as fixed in such agreement or agreements shall be produced from the leased land, such agreement shall be deemed to be a compliance with the provisions hereof.

3. At such time as Lessee shall have drilled and completed any well or wells on the leased land which shall indicate a sufficient power potential or the existence of extractable minerals in commercially paying quantities, Lessee shall have the right at any time thereafter to construct and install facilities for the commercial sale or use of steam or steam power produced on the leased land or lands in the vicinity thereof, or for the extraction of extractable minerals, or for development of electric power from the use of steam or steam power, and for commercial sale thereof, and at such time to purchase from the Lessor at the fair market value the land so required and used for such purposes. Such facilities for the utilization of the steam or steam power, or the extraction of extractable minerals thereof developed on the leased land, may be installed or situated on the leased land or on lands other than the leased land at Lessee's option. Upon completion of a well or wells on the leased land which shall indicate a sufficient power potential, or extractable minerals in commercially paying quantities, or upon the commencement of construction or installation of facilities for the utilization or sale, as aforesaid, of steam or steam power or extractable minerals, or upon

commencement of the sale of such steam or steam power or extractable minerals, then upon any such occurrence the monthly rental obligations of Lessee hereunder shall cease.

4. Lessee shall have the right to drill such well or wells on the leased land as Lessee may deem desirable for the purposes hereof; including wells for injection or reinjection purposes, provided, however, that notwithstanding any provisions of this lease to the contrary, Lessee shall utilize for such purpose or purposes only so much of the leased land as shall be reasonably necessary for Lessee's operations and activities thereon and shall interfere as little as is reasonably possible with the use and occupancy of the leased land by Lessor. No such well shall be drilled within an area of 100 feet of Lessor's house or surrounding buildings without the consent of Lessor.

5. ~~Lessee shall pay to Lessor as royalty Ten Percent (10%) of the~~ gross proceeds received by Lessee from the sale of steam, or steam power, as such, produced, saved and sold by Lessee from the leased land at and as of the point of origin on the leased land. Royalty on steam shall be computed on the basis of the number of kilowatt hours of electric power generated by the use of such steam, or shall be computed on whatever basis which shall more nearly reflect the royalty portion of the gross proceeds received by Lessee from the sale of steam and steam power, as such, produced from the leased land at and as of the point of origin on the leased land. With respect to extractable minerals other than gas, Lessee shall pay to Lessor as royalty Ten Percent (10%) of the net proceeds received by Lessee from the sale of effluence (containing minerals and/or minerals in solution) produced and sold from any well or wells on the leased land, or in the event Lessee does not sell such effluence but processes the effluence and extracts minerals therefrom, Lessee shall pay to Lessor as royalty Ten Percent (10%) of the proceeds received by Lessee from the sale of minerals and/or minerals in solution contained in and extracted from the effluence produced and sold from such well or wells less costs of transportation and extraction. Lessee shall have the right to commingle, for the purpose of storing, transporting, utilizing, selling or processing, the steam or steam power or extractable minerals produced from the leased land, with the steam or steam power or extractable minerals produced from other lands, and to meter, gauge or measure the production from the leased land, and to compute and pay Lessor's royalty on the basis of such production as so determined. Lessee shall pay to Lessor on or before the twenty-fifth day of each and every month the royalties accrued and payable for the preceding calendar month, and in making such royalty payments Lessee shall deliver to Lessor statements setting forth the basis for computation and determination of such royalty. In the event that the production of steam or extractable minerals from the leased land or from lands in the general area of the leased land should at any time exceed the demand therefor or the facilities for use thereof, and the Lessee elects to reduce the total production, then in that event the production of each well participating on a commingling basis shall be reduced in a percentage amount equal to its proportion of the total production of all participating wells prior to such reduction. **See Addendum attached hereto.**

6. Lessee shall not be required to account to Lessor for or to pay any royalty on steam, steam power or extractable minerals produced by Lessee on the leased land which are not utilized, saved or sold, or which are used by Lessee in its operations on or with respect to the leased land for or in connection with the development and production of steam or extractable minerals, or in the operation of facilities utilized in the generation of electric power, or which are unavoidably lost, provided that if such steam, steam power or extractable minerals are sold by Lessee, Lessor shall be entitled to Lessor's royalty thereon.

Lessee shall have the right to use and utilize such water or water rights in, on, produced from or appurtenant to or crossing the leased land as Lessee may reasonably require in connection with its operations on the leased land in furtherance of the objectives of this lease and of Lessee's business and operations, without payment therefor to Lessor, provided that such use by Lessee shall be lawful and provided, further, that such use by Lessee of any water or water rights, as aforesaid, existing as of the date hereof shall not interfere with Lessor's requirements for Lessor's own use thereof for domestic or agricultural purposes on the leased land nor interfere with Lessor's contractual commitments existing as of the date hereof for the use thereof on lands other than the leased land. Lessor shall have the right to use for Lessor's own domestic or agricultural purposes on the leased land any surplus water resulting from Lessee's operations on the leased land which is not required by Lessee in its activities or operations; provided that Lessor, at Lessor's expense, shall make adequate provision for the taking and transporting of such water from such place or places on the leased land as Lessee shall designate and for the storage and treatment, if required, of such water. Except as aforesaid, any surplus water resulting from Lessee's activities or operations may be utilized, disposed of or dealt with by Lessee in such manner as Lessee shall deem appropriate.

7. In the event Lessor at the time of making this lease owns a less interest in the leased land than the fee simple estate therein and thereto, then the rentals and royalties accruing hereunder shall be paid to Lessor in the proportions which Lessor's interest bears to the entire fee simple estate in the leased land.

8. There is hereby expressly reserved to Lessor and to Lessee the right and privilege to convey, transfer or assign, in whole or in part, or to deal with in any manner, subject to the provisions hereof, their respective rights and interests in and under this Lease and Agreement or in the leased land, or the steam, steam power, electric power, or extractable minerals, produced on or from the leased land, but in the event Lessor shall sell or transfer any part or parts of the leased land or any interest in the aforesaid extractable minerals therefrom Lessee's obligations hereunder shall not thereby be altered, increased or enlarged, but Lessee may continue to operate the leased land and to pay and settle rents and royalties as an entirety. No change in ownership of Lessor's interest (in whole or in part) shall be binding upon Lessee until the expiration of 30 days after Lessee is furnished a certified or adequate evidentiary copy of the instrument or instruments affecting such change.

9. The obligations of Lessee hereunder shall be suspended (but without impairment of Lessor's rights under (a) or (b) of Clause 2) and the term of this lease shall be extended, as the case may be, while Lessee is prevented from complying therewith, in whole or in part, by strikes, lockouts, riots, actions of the elements, accidents, delays in transportation, inability to secure labor or materials in the open market, laws, rules or regulations of any federal, state, municipal or other governmental agency, authority or representative, inability to secure, or absence of, a market for commercial sale of steam or steam power or extractable minerals developed on or from the leased land or for electric power developed therefrom, or other matters or conditions beyond the reasonable control of Lessee, whether or not similar to the conditions or matters herein specifically enumerated.

It is further agreed that if at any time after expiration of twenty-five years from the date hereof the production of steam, or of electric power or of extractable minerals, theretofore derived or produced from the leased land, ceases for any cause other than one or more of the causes hereinabove enumerated, this lease shall nevertheless remain in full force and effect for an additional period of one year and thereafter if, and so long as, Lessee commences and continues diligently and in good faith the steps, operations or procedures to cause a resumption of such production, until such production shall be resumed.

10. Lessee shall pay all taxes levied on Lessee's structures and improvements placed on the leased land by Lessee and shall pay any and all taxes which may be levied or assessed against any personal property owned by Lessee or which may be produced by Lessee in connection with Lessee's operations on the leased land. In the event any taxes are levied or assessed against the right to produce steam or extractable minerals from the leased land or in the event any increase in the taxes levied or assessed against the leased land shall be based upon the production from the leased land of steam or extractable minerals, then in either such event Lessee shall pay Ninety Percent (90%) of any such taxes and Lessor shall pay Ten Percent (10%) thereof. Lessor shall pay all taxes levied or assessed against the leased land as such without reference to the production of steam or extractable minerals therefrom and shall pay all taxes levied and assessed against any and all rights in or to or with respect to the leased land not covered by this Lease and Agreement and shall pay all taxes levied and assessed against all structures and improvements owned by Lessor or placed on the leased land by or pursuant to permission of Lessor.

11. Lessor, or its agents, may at all times examine said land and the workings, installations and structures thereon and operations of Lessee thereon, and may inspect the books and records of Lessee with respect to matters pertaining to the payment of royalties to Lessor. Lessee agrees, on written request, to furnish to Lessor copies of such information.

12. All the labor to be performed and materials to be furnished in the operations of Lessee hereunder shall be at the cost and expense of Lessee, and Lessor shall not be chargeable with, or liable for, any part thereof, and Lessee shall protect said land against liens of every character arising from its operations thereon. Lessee, at its own expense, prior to commencing operations on the leased land, shall obtain and shall maintain adequate Workmen's Compensation insurance, and shall also obtain and maintain public liability insurance coverage in amounts of not less than $100,000 for one person and $300,000 for one accident, and property damage insurance coverage in an amount of not less than $50,000. Lessee shall protect Lessor against damages of every kind and character which may be occasioned to any of the parties hereto or to any other persons by reason of the operations or workings of the Lessee or those under Lessee's control upon said leased land, but Lessee shall not be liable hereunder in the event of the negligence or willful misconduct of such party or parties, person or persons.

13. In the event any buildings or personal property shall be damaged, destroyed or required to be removed, or any grazing land destroyed, because of Lessee's operations on the leased land, Lessee shall be liable for payment of the reasonable value thereof. In the event Lessee shall elect to locate a wellsite and an access road thereto on agricultural land at the time under cultivation, then Lessee shall pay to Lessor a sum agreed upon between Lessor and Lessee to be based upon the value of the crop actually destroyed or withheld from production by reason of Lessee's operations thereon. Upon the written request of Lessor, Lessee agrees to lay below plow depth all pipe lines, except lines for the gathering and transporting of steam, and discharge or other water lines, which it constructs through cultivated fields, and upon similar request, agrees to fence all sump holes or other excavations to safeguard livestock on said land. Upon completion or abandonment of any well drilled on the leased land, or upon the termination of this lease, Lessee shall level and fill all sump holes and excavations and shall remove all debris and shall leave the location of such well in a clean and sanitary condition. Lessee in its operations on the leased land shall at all times have due and proper regard for the rights and convenience, and the health, welfare and safety of Lessor and of all tenants and persons lawfully occupying the leased land. In any well drilled by Lessee hereunder sufficient casing shall be set and cemented in such well so as to seal off known surface waters occurring above a depth of one hundred feet from the surface to the extent that Lessee is reasonably able so to do under conditions encountered in such well.

14. In the event Lessee defaults under any of the provisions of this Lease and Agreement and fails to begin in good faith to remedy the same within sixty (60) days after written notice from Lessor so to do, specifying in said notice the nature of such default, then at the option of Lessor this lease shall forthwith cease and terminate and all rights of Lessee in and to the leased land shall be at an end, except that in the event of such termination Lessee shall have the right to remove from the leased land, as hereinafter provided, all surface facilities and improvements of whatsoever kind and character placed upon the leased land by Lessee. Lessee shall have the right at any time prior or after default hereunder, upon payment of the sum of Ten Dollars ($10.00) to Lessor, to quitclaim and surrender to Lessor all right, title and interest of Lessee in and to the leased land, or any part thereof, and thereupon all rights and obligations of the parties hereto one to the other shall cease and terminate as to the lands or area so quitclaimed and surrendered, save and except as to accrued monetary or royalty obligations of Lessee then payable as to which Lessee shall remain liable to Lessor; and provided that in the event of a partial quitclaim and surrender, any future rentals will be reduced proportionately to the number of acres in the area so quitclaimed and surrendered.

15. Lessee shall have the right at any time and from time to time to remove from the leased land any and all machinery, equipment, structures, installations and property of every kind and character placed upon said leased land by or pursuant to permission of Lessee, provided that such removal shall be completed within a reasonable time after termination of this lease in the event such removal shall occur after termination of this lease. In the event that any damages to Lessor's property may be occasioned by the removal of Lessee's property as above set forth then Lessee agrees to compensate Lessor for such damages.

16. Lessor hereby warrants and agrees to defend title to the leased land and agrees that Lessee, at its option, may pay and discharge any taxes, mortgages, trust deeds or other liens or encumbrances existing, levied or assessed on or against the leased land, as to which Lessor is in default, and in the event Lessee exercises such option, Lessee shall be subrogated to the rights of any holder or holders thereof, and shall have the right to reimburse itself by applying to the discharge of any such mortgage, tax or other lien or encumbrance any royalties or rentals accruing to Lessor hereunder.

17. (a) The term "power potential" as used in this lease with respect to any well or combination of wells producing steam, steam power or thermal energy shall mean the number of kilowatts of electric power capable of being generated by the steam, steam power or thermal energy produced from such well or wells by means of the introduction thereof into or the application thereof to or utilization thereof in connection with any power generating facility or equipment designed for use thereof which Lessee deems desirable to utilize with respect thereto.

(b) The term "sufficient power potential" as used herein shall be deemed to mean that volume and character of steam, steam power, or thermal energy produced from a well or combination of wells drilled on the leased land, which, in the judgment of Lessee, shall be sufficient for the commercial sale thereof, or which, in Lessee's judgment, shall warrant the construction of facilities for the commercial use or sale thereof or for the utilization thereof for generation of electric power for commercial sale, or which, in the judgment of Lessee, warrants the drilling of additional wells on the leased land for the production of an additional quantity of steam, steam power or thermal energy therefrom.

(c) The terms "steam", "steam power", and "thermal energy" shall mean natural geothermal steam, and shall also mean the natural heat of the earth and the energy present in, resulting from, or released from or created by,

or which may be extracted from, the natural heat of the earth or the heat present below the surface of the earth, in whatever form such heat or energy occurs and by whatever method, methods, or processes (now or hereafter known) which may be utilized for the extraction or utilization of such heat or energy for electric power generating purposes.

(d) The term "extractable minerals" shall mean any minerals in solution in the well effluence, and minerals or gasses produced from or by means of any well or wells on the leased land or by means of condensing steam or processing water produced from or the effluence from any such well or wells.

(e) The word "commercial" used in connection with the phrases "commercial value", "commercial quantities", "commercial production", "commercial sale (or sales)" and "commercial use" shall be deemed to mean such quantities of such value produced, sold or used which, after deducting Lessee's normal operating costs (or extraction costs in case of extractable minerals) will provide to Lessee a net return over such costs sufficient to cause Lessee to continue production thereof or to elect to proceed with further development or exploratory operations on the leased land under this lease.

18. Any notice or other communication hereunder from Lessor to Lessee shall be given in writing by delivering same personally to Lessee or by sending same by registered or certified mail, postage prepaid, addressed to Lessee at Magma Power Co., 631 So. Witmer St., Los Angeles, Calif. 90017

and any notice or other communication hereunder from Lessee to Lessor shall be given in writing by delivering same personally to Lessor or by sending same by registered or certified mail, postage prepaid, addressed to Lessor at J. W. Weightman, c/o Wm. B. Weightman, 1730 No. Ave.46,L.A.41,Cal Any notice mailed, as aforesaid, shall be deemed given and received 72 hours after the deposit thereof in the United States mail within the State in which the leased land is situated, and if deposited in the United States mail outside of such State, shall be deemed given and received 96 hours after the deposit of same in the United States mail. The parties may upon written notice at any time and from time to time change their respective addresses for the purposes hereof.

19. Lessee may, at any time or from time to time for drilling, development, or operating purposes, combine all or any part of the leased land into an operating unit with any lands (whether held by Lessee or others and whether or not the surface of such lands may be used for development or operating purposes), whether or not adjacent or contiguous, situated in the district or natural steam field (in which the leased land is situated) which Lessee desires to develop or operate as a unit, provided that the total acreage to be embraced within any such drilling, development, or operating unit shall not exceed the acreage contained in three sections of land. Such a unit shall become in existence upon Lessee's filing in the office of the County Recorder of the County in which the leased land is situated, a notice of such unitization, describing said unit. Lessee shall also mail a copy of such notice to Lessor at its last known address. Any well (whether or not Lessee's well) commenced, drilled, drilling and/or producing in any part of such operating unit shall for all purposes of this lease be deemed a well commenced, drilled, drilling and/or producing on the leased land, and Lessee shall have the same rights and obligations with respect to drilling and producing operations upon the lands from time to time included within any such operating unit as Lessee would have if such lands constituted the leased land; provided, however, that notwithstanding this or any other provision or provisions of this lease to the contrary,

(1) production as to which royalty is payable from any such well or wells drilled upon any such operating unit, whether located upon the leased land or other lands, shall be allocated to the leased land in the proportion that the acreage of the leased land in such operating unit bears to the total acreage of such operating unit, and such allocated portion thereof shall for all purposes of this lease be considered as having been produced from the leased land, and the royalty payable under this lease with respect to the leased land included in such operating unit shall be payable only upon that proportion of such production so allocated thereto, and

(2) if any taxes of any kind are levied or assessed (other than taxes on the land and on Lessor's improvements), any portion of which is chargeable to Lessor under paragraph 10 hereof, then the share of such taxes to be borne by Lessor as provided in this lease, shall be in proportion to the share of the production from such operating unit allocated to the leased land.

As to each and any such operating unit, Lessee shall have the right to commingle, for the purpose of utilizing, selling or processing or causing to be processed, the steam or steam power and/or extractable minerals produced from such operating unit with the steam or steam power and/or extractable minerals produced from other lands or units, so long as the production from the unit which includes all or portions of the leased land is measured, metered or gauged as to such unit production; unit production so measured, metered or gauged shall then be allocated to the leased premises in accordance with (1) above.

Allocation, as aforesaid, of production from any such operating unit, whether to the leased land or in like manner to other lands therein, shall continue notwithstanding any termination, either in whole or in part (by surrender, forfeiture or otherwise), of this or any other lease covering lands in such operating unit until such time as the owner of such lands shall enter into a lease or agreement to drill for or produce or shall drill for or produce or permit or cause the drilling for or producing of any natural steam or extractable minerals from any part of such lands, whereupon all such lands formerly included in such operating unit and as to which the lease covering the same shall have terminated, shall be excluded in determining the production to be allocated to the respective lands in such operating unit, and in the event of the failure of Lessor's, or any other owner's, title as to any portion of the land included in any such operating unit, such portion of such land shall likewise be excluded in allocating production from such operating unit; provided, however, Lessee shall not be held to account for any production allocated to any lands to be excluded as aforesaid, from any such operating unit unless and until Lessee has actual knowledge of the aforesaid circumstances requiring such exclusion.

20. In the event any part or portion or provision of this instrument shall be found or declared to be null, void or unenforceable for any reason whatsoever by any Court of competent jurisdiction or any governmental agency having authority thereover, then and in such event only such part, portion or provision shall be affected thereby, and such finding, ruling or decision shall not in any way affect the reminder of this instrument or any of the other terms or conditions hereof, or any lesser rights or obligations embraced within any provision so declared to be void or unenforceable which such lesser rights or obligations are not, or would not be so held to be, void or unenforceable, which said remaining terms and conditions and such lesser rights or obligations, as aforesaid, of this instrument shall remain

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COLUSA COUNTY

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binding, valid and subsisting and in full force and effect between the parties hereto, it being specifically understood and agreed that the provisions hereof, and the lesser rights or obligations embraced within such provisions, are severable for the purposes of the provisions of this clause.

21. This Lease and Agreement and all of the terms, covenants and conditions hereof shall extend to the benefit of and be binding upon the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties have caused this instrument to be duly executed as of the date hereinabove first written.

BAILEY MINERALS CORPORATION,
a Nevada corporation

BY J. W. Weightman
President

Secretary

J. W. Weightman
J.W. WEIGHTMAN
LESSOR

LESSOR

MAGMA POWER COMPANY, a corporation

By
President

Attest:
Secretary

LESSEE

The foregoing is consented to and joined in by the undersigned with respect to the Sunshine Mining Claim and the land covered thereby and as to any interest of the undersigned in any of the land covered hereby:

WILLIAM B. WEIGHTMAN

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COLUSA COUNTY

STATE OF CALIFORNIA)
) SS.
COUNTY OF LOS ANGELES)

On this 12th day of August, 1965, before me, the undersigned, a Notary Public in and for the County of Los Angeles, State of California, personally appeared J.W. WEIGHTMAN, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

WITNESS my hand and official seal.

PHILLIP CHRONIS
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Expires August 8, 1967

Phillip Chronis
Notary Public in and for the County of Los Angeles, State of California.

My commission expires:

STATE OF CALIFORNIA)
) SS.
COUNTY OF LOS ANGELES)

On this 12th day of August, 1965, before me, the undersigned, a Notary Public in and for the County of Los Angeles State of California, personally appeared ROY ~~XXXXXX~~ ROOT known to me to be the President, and JOSEPH W. AIDLIN, known to me to be the Secretary of MAGMA POWER COMPANY, the corporation that executed the within instrument, known to me to be the persons who executed the within instrument, on behalf of the corporation herein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

PHILLIP CHRONIS
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Expires August 8, 1967

Phillip Chronis
Notary Public in and for the County of Los Angeles, State of California.

My commission expires:

OFFICIAL RECORDS
COLUSA COUNTY

STATE OF CALIFORNIA }
COUNTY OF_____ }

On this ____day of _____, 1965, before me, the undersigned, a Notary Public in and for the County of _____, State of_____, personally appeared WILLIAM E. KNIGHTMAN, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

WITNESS my hand and official seal.

_____

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES }

On this 12th day of August, 1965, before me, the undersigned, a Notary Public in and for the County of Los Angeles, State of California personally appeared D. W. Wellington, known to me to be the President and _____ known to me to be the Secretary of the Bailey Minerals Corporation, the corporation that executed the within instrument, known to me to be the persons who executed the within instrument, on behalf of the corporation herein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

PHILLIP CHRONIS
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Expires August 8, 1967

Phillip Chronis

ADDENDUM TO LEASE AND AGREEMENT
DATED JUNE 3, 1965 between
BAILEY MINERALS CORPORATION and
J. W. WEIGHTMAN as LESSOR and
MAGMA POWER COMPANY, as LESSEE.

The following provisions are substituted in lieu of the paragraph 5 stricken in the main body of the foregoing lease and paragraph 5 which follows is and shall be deemed to be paragraph 5 of said lease:

5. Lessee shall pay to Lessor as royalty Ten Percent (10%) of the gross proceeds received by Lessee from the sale of steam, or steam power, as such, produced, saved and sold by Lessee from the leased land at and as of the point of origin on the leased land. Royalty on steam shall be computed on the basis of the number of kilowatt hours of electric power generated by the use of such steam, or shall be computed on whatever basis which shall more nearly reflect the royalty portion of the gross proceeds received by Lessee from the sale of steam and steam power, as such, produced from the leased land at and as of the point of origin on the leased land. With respect to extractable minerals, Lessee shall pay to Lessor as royalty Ten Percent (10%) of the net proceeds received by Lessee from the sale of effluence (containing minerals and/or minerals in solution) produced and sold from any well or wells on the leased land, or in the event Lessee does not sell such effluence but processes the effluence and extracts minerals therefrom, Lessee shall pay to Lessor as royalty Ten Percent (10%) of the proceeds received by Lessee from the sale of minerals and/or minerals in solution contained in and extracted from the effluence produced and sold from such well or wells less costs of transportation and extraction; provided, however, as to any mercury contained in any effluence produced and sold, or any mercury extracted by Lessee, Lessor's royalty shall be Twenty Percent (20%) on the and only the mercury, less, in the case of extraction by Lessee, the cost of transportation and extraction. For the purposes hereof cost or costs of transportation and extraction shall exclude all drilling, producing or related costs incurred prior to removal from the ground. The royalties herein stipulated to be paid Lessor are arrived at and are to be computed in contemplation of an "arm's-length" sale of steam or steam power or effluance (containing minerals and/or minerals in solution) by Lessee, including any such sale as may be made to a subsidiary or affiliate of Lessee, or to Lessee itself for the purpose of conversion or extraction. Lessee shall have the right to commingle, for the purpose of storing, transporting, utilizing, selling, or processing, the steam or steam power or extractable minerals produced from the leased land, with the steam or steam power or extractable minerals produced from other lands, and to meter, gauge or measure the production from the leased land, and to compute and pay Lessor's royalty on the basis of such production as so determined. Lessee shall pay to Lessor on or before the twenty-fifth day of each and every month the royalties accrued and payable for the preceding calendar month, and in making such royalty payments Lessee shall deliver to Lessor statements setting forth the basis for computation and determination of such royalty. In the event that the production of steam or extractable minerals from the leased land or from lands in the general area of the leased land should at any time exceed the demand therefor or the facilities for the use thereof, and the Lessee elects to reduce the total production, then in that event the production of each well participating on a commingling basis shall be reduced in a percentage amount equal to its proportion of the total production of all participating wells prior to such reduction.

The lands covered by the herein Lease and Agreement between BAILEY MINERALS CORPORATION and J. W.WEIGHTMAN as Lessor and MAGMA POWER COMPANY as Lessee are as follows, to wit:

These certain lands situated in the County of Colusa, State of California, described as follows, to wit:

PARCEL NO. 1: COMMENCING at the Southwest corner of the Northeast quarter (NE 1/4) of Section 29, Township 14 North, Range 5 West, M.D.B. & M., and running thence northerly along the midsection line of said Section 29, 551.0 feet to a point, thence at right angles easterly 662.0 feet to a point, thence at right angles S. 0° 37' E. 575.2 feet to the midsection line running easterly and westerly through said Section 29, thence westerly along said last midsection line, 40 rods to the place of beginning, containing eight and one-half (8-1/2) acres, more or less, and being a portion of Lot No. Eight (8) in the Southwest quarter (SW 1/4) of the Northeast quarter (NE 1/4) of Section 29, Township 14 North, Range 5 West, M.D.B. & M.

PARCEL NO. 2: BEGINNING at the Northeast corner of the Southeast quarter (SE 1/4) of the Northeast quarter (NE 1/4) of Section 29, Township 14 North, Range 5 West, M.D.B. & M., and running thence along the line between Sections 28 and 29, said Township and Range S. 00° 05' E. 437.0 feet to a one inch iron pipe; thence S. 54° 21' W. 363.0 feet to a one inch iron pipe; thence N. 01° 06' W. 123.0 feet to a 3/4 inch iron pipe; thence S. 62° 10' W. 131.0 feet to a one inch iron pipe; thence S. 34° 37' W. 139.0 feet to a cross cut in the top of an old quicksilver retort; thence S. 27° 14' E. 219.0 feet to a one inch iron pipe; thence S. 49° 46' W. 680.0 feet to a one and one-quarter inch iron pipe; thence N. 86° 46' W. 640.15 feet to a one inch iron pipe; thence N. 03° 57' E. 1228.1 feet to a one inch iron pipe; thence N. 87° 06' E. 1466.2 feet to the place of beginning, being a part of the Northeast quarter (NE 1/4) of Section 29, Township 14 North, Range 5 West, M.D.B. & M., Colusa County, California containing thirty-four and fifty-five one hundredths (34.55) acres, more or less, designated as Tract No. One on Plat of Survey No. 8 on Section 29, Township 14 North, Range 5 West, M.D.B. & M., Colusa County, California, surveyed June 15-16-17, 1919, by Chas. de St. Maurice, County Surveyor, Colusa County, California.

PARCEL NO. 3: COMMENCING at a one inch gaspipe which is situate S. 87° 06' W. 1466.2 feet from a four inch by four inch post at the 1/16 section corner between the North half of Section 28, and the North half of Section 29, Township 14 North, Range 5 West, M.D.B. & M., and running thence S. 03° 57' W. 333.1 feet to a one inch gaspipe, thence S. 78° 50' W. 347.0 feet to a one and one-fourth inch gaspipe, thence N. 77° 06' W. 157.9 feet to a one inch gaspipe; thence N. 050 03' W. 349.1 feet to a one inch gaspipe; thence N. 86° 52' E. 78.6 feet to a one and one-fourth inch gaspipe; thence N. 87° 06' E. 473.5 feet to the place of beginning, and containing four and thirty-three one hundredths (4.33) acres, more or less, designated as Tract No. Two on Plat of Survey No. 8 On Section 29, Township 14 North, Range 5 West, M.D.B. & M., Colusa County, California, surveyed June 15-16-17, 1919, by Chas. de St. Maurice, County Surveyor, Colusa County, California.

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PARCEL NO. 4: COMMENCING at the Southwest corner of the Northeast quarter (N.E. 1/4) of Section 29, Township 14 North, Range 5 West, M.D.B. & M., and running thence northerly along the midsection line of said section 29,561.0 feet, thence easterly 662.0 feet to the point of beginning; thence northerly 200.04 feet to a point, thence North 35° 46' W. 36.3 feet to a point, thence S. 28° 25' W. 249.0 feet to a point, thence S. 85° 45' E. 140.0 feet to the point of beginning, containing one-half (1/2) acre, more or less.

PARCEL NO. 5: The Little Giant Claim, the Dewey Claim and Central Claim, known as U.S. Lot 3605, also known as the Central Consolidated Quicksilver Mining Claim consisting of Central, Little Giant and Dewey Lode Claims designated as Lot 3605 as described in Patents of the United States of America to Empire Quicksilver Mining Company, dated July 10, 1900, and recorded September 6, 1900 in Book K of Patents at Page 405, Colusa County Records. Said patented claims being located in Sections 28 and 29, Township 14 North, Range 5 West, M.D.B. & M., in said County of Colusa, State of California.

PARCEL NO. 6: The portions of the Manzanita location, also known as Lots 45, lying within Section 29, Township 14 North, Range 5 West, Colusa County, California, and North of a line running South 87° 06' West from the Northeast corner of the Southeast quarter (SE 1/4) of the Northeast quarter (NE 1/4) of said Section, and the portion of said Manzanita Location lying in Section 28 in said Township and Range.

PARCEL NO. 7: United States Lot 3606 consisting of the Empire, Hidden Treasure, Mercury King and Mercury Queen lot claims as described in patents of the United States of America to Empire Quicksilver Mining Company, dated July 10, 1900 and recorded in Book K of Patents, at Page 408, Colusa County Records, all of the same being located in Section 28, Township 14 North, Range 5 West, M.D.B. & M., Colusa County, California.

PARCEL NO. 8: A four-acre extension of Hidden Treasure claim on the North and West ends thereof, including Lot 2 in Section 28, Township 14 North, Range 5 West, M.D.B. & M., Colusa County, California (but not extending into Section 29).

PARCEL NO. 9: The portion of land situated in the Southwest quarter (SW 1/4) of the Northeast quarter (NE 1/4) of Cherry Hill Mine, consisting of 10-1/2 acres more or less, bordered on the Northeast and West by land of the Title Insurance and Guarantee Company and on the South by land of R. M. Gibson.

PARCEL NO. 10: The Sunshine Mining Claim (Lode Claim) in Section 29 Township 14 North, Range 5 West M.D.B. & M. consisting of 6 acres more or less. ?

PARCEL NO. 11: All quicksilver and quicksilver rights in the Northeast quarter (NE 1/4) of Section 29, Township 14 North, Range 5 West, M.D.B. & M., Colusa County, California. ?

PARCEL NO. 12: All of the oil, gas and other hydrocarbon substances in the following described property:

South half (S 1/2) of the Southeast quarter (SE 1/4) of Section 16; East half (E 1/2) of the Southwest quarter (SW 1/4), Southeast quarter (SE 1/4) of the Northwest quarter (NW 1/4), Northwest quarter (NW 1/4) of the Southeast quarter (SE 1/4) of Section 17; South half (S 1/2) of the Northeast quarter (NE 1/4), Northeast quarter (NE 1/4) of the Southeast quarter (SE 1/4) of Section 20; North half (N 1/2), Southeast quarter (SE 1/4) Northeast quarter (NE 1/4) of the Southeast quarter (SW 1/4) of Section 21; West half (W 1/2), Southeast quarter (SW 1/4) of the Southeast quarter (SE 1/4) of Section 22; Southwest quarter (SW 1/4) of the Southwest quarter (SW 1/4) of Section 26; Section 27; East half (E 1/2) of the Northeast quarter (NE 1/4) of Section 28; Northeast quarter (NE 1/4) of the Northeast quarter (NE 1/4) of Section 34; Northwest quarter (NW 1/4) of the Northwest quarter (NW 1/4) of Section 35; all in Township 14 North, Range 5 West, M.D.B. & M.

PARCEL NO. 13: COMMENCING at a point 128 feet 6 inches South from a point on the Southeasterly boundary of the Hughes Mill Site which said point on the Southeasterly boundary of the Hughes Mill Site is 265 feet distant, on a line running S. 49° 34' W. from a stake which marks the Southeasterly corner of the Hughes Mill Site and the Southwesterly corner of the Manzanita Mine, said point of commencement would be intersected, or nearly so, by a continuation Southeasterly of the line dividing the Hughes Mill Site and the Monticello Mill Site, running thence N. 80° 16' E. fifty (50) feet; thence due South one hundred (100) feet; thence due West to a point one hundred (100) feet, more or less, due South of the point of commencement, thence due North to the place of beginning; being the same lot or parcel of land conveyed by Deed from Polly Ann Tully and Mary A. Tully to Frank J. Schuckman dated February 20th, 1900, and recorded in Book 53 of Deeds, at Page 380, Colusa County Records.

PARCEL NO. 14: That certain lot or parcel of land conveyed by Deed from Polly Ann Tully to George W. Parsons dated March 5th, 1901, and recorded in Book 51 of Deeds, at Page 195, Colusa County Records, herein particularly described as follows: BEGINNING at the Northwest corner of that certain lot or parcel of land conveyed by Deed from Polly Ann Tully and Mary A. Tully to Frank J. Schuckman, dated February 20, 1900, and recorded in Book 53 of Deeds, at Page 380, Colusa County Records, and running thence South one hundred (100) feet, more or less, along the West line of the said Frank J. Schuckman lot to the Southwest corner thereof; thence Easterly along the South line of the aforesaid Frank J. Schuckman lot, fifty (50) feet to the Southeast corner thereof; thence South to the quarter section line running Easterly and Westerly through the center of Section Twenty-nine (29) in Township Fourteen (14) North, Range 5 West, M.D.B. & M., thence Westerly along said quarter section line eighty-eight (88) feet, more or less, to the Southeast corner of that certain lot or tract of land conveyed by deed from Tilden Jones to Marshal H. Smith, dated May 26, 1898, and recorded in Book 40 of Deeds, at Page 207, Records of Colusa County, thence North along the East boundary line of the said Marshal H. Smith tract of land to the Northeast corner thereof; thence E. 80° 16' E. thirty-eight (38) feet, more or less, to the place of beginning, and being the same parcel of land conveyed by deed from Polly Ann Tully to George W. Parsons, as aforesaid.

PARCEL NO. 15: That certain lot or parcel of land conveyed by Deed from Tildan Jones to Marchel H. Smith, dated May 28, 1894 and recorded in Book 40 of Deeds, at Page 207, herein described as follows: COMMENCING on the South line of the Northeast quarter (NE 1/4) of Section 29, in Township 14 North, Range 5 West, M.D.B. & M., where the South corner of the Monticello Mill Site touches said line and running thence Northeasterly along the Southeasterly boundary of said Monticello Mill Site until it touches the County Road surveyed by J. H. Price as described in Survey of County Road No. 171 New Series of Colusa County, filed in the office of the County Clerk of Colusa County; thence along said County Road to a point fifty (50) feet southerly beyond a stake between the Hughes Mill Site and the Monticello Mill Site, from which point the Northwest corner of that certain lot or parcel of land conveyed by Deed from Polly Ann Tully and Mary A. Tully to Frank J. Schmokman dated February 20th, 1900, and recorded in Book 53 of Deeds, at Page 180, Colusa County Records, bears N. 80° 15' E. thirty-eight (38) feet, more or less, distant; thence South to the aforesaid quarter section line; thence Westerly along said quarter section line to the place of beginning and being the same parcel of land conveyed by Deed from Tildan Jones to Marchel H. Smith, as aforesaid.

Consisting of 171.3 acres, more or less, in Sulphur Creek Mining District, Colusa County, California.

Exhibit B

REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION

Amendment To The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

To Determine Certain Beneficial Uses Are Not Applicable in and Establish Water Quality Objectives for Sulphur Creek

Final Staff Report

March 2007

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

EXECUTIVE SUMMARY

This staff report proposes an amendment to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan) to make a determination that certain beneficial uses are not applicable and establish site-specific water quality objectives for mercury in Sulphur Creek (Colusa County, CA), a tributary to Bear Creek in the Cache Creek watershed. Natural sources of mercury and salts make Sulphur Creek unsuitable for drinking and for habitat for aquatic life that is consumable by humans. The proposed amendment would recognize that the beneficial uses of municipal and domestic supply (MUN) and the human consumption of aquatic organisms do not exist and are not attainable in Sulphur Creek. The Basin Plan currently does not specifically designate beneficial uses for Sulphur Creek.

Sulphur Creek does not support the MUN beneficial use or the human consumption of aquatic organisms. Naturally occurring concentrations of total suspended solids, mercury, and electrical conductivity exceed drinking water criteria and make Sulphur Creek unsuitable habitat for fish and consumable aquatic invertebrates. Total suspended solids and electrical conductivity also exceed the criteria in Resolution 88-63 for excepting the MUN beneficial use designation for surface and ground waters. These uses are not existing and cannot feasibly be attained in the future.

Because these uses do not exist and are not attainable, none of the promulgated water quality criteria for mercury apply, so staff proposes a site-specific water quality objective for mercury in Sulphur Creek based on natural background conditions. The site-specific objective will protect the beneficial uses of Sulphur Creek that existed prior to anthropogenic disturbance in the watershed. The implementation actions required to meet the proposed objective are described in the Sulphur Creek mercury total maximum daily load (TMDL) and the Cache Creek Watershed Basin Plan amendment adopted by the Central Valley Water Board in October 2005. This amendment, along with the Sulphur Creek mercury TMDL, fulfills the US EPA requirements for a TMDL.

Exhibit C

Andrew Zdon, P.G., C.HG., C.E.G., R.E.A.

Principal Hydrogeologist

Hydrogeologic

Hydrogeologic Conceptual Models
Aquifer Tests
Flow Simulations
Seepage Modeling
Fate and Transport Modeling
Mass Flux Calculation
LNAPL Modeling

Remediation

Pumping Program Development and Evaluation
Bio-Remediation
Natural Attenuation
Soil Vapor Extraction
Dual-phase Extraction

Summary

Mr. Zdon is a Principal Hydrogeologist for the Source Group, Inc., a full-service environmental consulting firm. He is also Operations Manager for the firm's Pleasant Hill office. He received a Bachelor of Science (B.Sc.) degree in geology from Northern Arizona University in 1984. He is a California Professional Geologist, Certified Engineering Geologist, Certified Hydrogeologist, and Registered Environmental Assessor 1. He is also a Registered Geologist in Arizona. He has more than 20 years of experience in a variety of regional and site-specific hydrogeology, engineering geology, and mining-related projects throughout the southwestern United States, New Zealand and Peru. His specialties in numerical groundwater modeling include flow and groundwater / surface water interactions, contaminant transport, and dual-phase flow. His work experience has included hydrogeologic and/or expert evaluation of groundwater contaminant problems at facilities that include pipelines, petroleum bulk facilities, manufacturing facilities, along with general fuel, airport and ski area facilities. As an expert hydrogeologist, he has evaluated and modeled complex hydrogeologic conditions. He has been retained as an expert for a total of four litigation cases. As a result of these expert cases, he has provided one declaration, been deposed twice, and testified in court on one occasion. These cases have involved a 70+ year old leaking oil pipeline, a 7,000 gallon fuel release in fractured volcanic rock above a town water supply system, a water rights issue concerning a spring system, and a mining-related issue. He is recognized as an expert in the area of numerical groundwater modeling and has been an instructor at California State University, Los Angeles in Groundwater Models and Management. He has also received Certificates of Commendation and Appreciation from the California Board for Geologists and Geophysicists for volunteering as a subject matter expert for the Board.

Project Experience

- Served as expert witness and Manager of environmental activities associated with a 7,000-gallon gasoline release that occurred during 1999 in faulted, volcanic terrain in the Eastern Sierra Nevada. Work conducted at the site has included characterization of bedrock units including the use of rotary drilling and oriented-core drilling, surface and down-hole geophysical surveys, and extensive vapor and groundwater sampling. Ongoing remediation has included vapor extraction within the vadose zone, and a multistage groundwater treatment process. Mr. Zdon had previously conducted environmental activities including site characterization and remediation (excavation of petroleum hydrocarbon-impacted soils) leading to site closure prior to the 1999 release. He also served as designated expert and providing testimony (deposition) concerning pre-existing site conditions and fate and transport modeling.
- Served as expert witness for property-owner concerning hydrogeologic conditions associated with leaking oil pipeline impacting private property, San Luis Obispo, California. Work involved reviewing existing data concerning site soils, fate and transport modeling, aquifer testing, etc., conducting limited field investigation to confirm conditions, and testimony (both deposition and in court).
- Served as an expert witness with regard to a water rights dispute concerning a spring used as a domestic water supply in the Mono Basin, Mono County, California.
- Hydrogeologic characterization of Arco Pipeline Company Terminals 2 and 3, Port of Long Beach, California. Program included soil sampling, well construction, destruction of previously existing wells, groundwater sampling, hydrocarbon bail-down testing, and aquifer testing. Also developed dual-phase flow model (for groundwater and petroleum hydrocarbons using MARS) to evaluate remedial alternatives at both terminals. This complex modeling effort accounted for tidal fluctuations, and their effects on groundwater levels and transport of light non-aqueous phase liquids.
- Served as consultant to Mono County conducting groundwater availability assessments for several Mono County communities. Work included conducting field reconnaissance activities, developing groundwater recharge estimates, evaluating local groundwater budgets, identifying potential future impacts due to regional growth, water quality issues, etc. He has also provided hydrogeologic support to the County of Mono with respect to reviewing and evaluating groundwater modeling conducted to evaluate potential impacts caused by expansion of a geothermal plant in Mono County.
- Hydrogeologic consultant for the Owens Valley Indian Water Commission through the development of hydrogeologic data gathering, development of conceptual models for the Lone Pine Reservation, Big Pine Reservation and Bishop Reservation areas of the Owens Valley, and development of numerical groundwater models for each of these areas. The models developed provide these Paiute/Shoshone tribes with tools to

Project Experience (cont.)

evaluate the impacts on local reservations of water resource activities conducted by outside agencies.

- Groundwater flow and solute transport modeling (MODFLOW and MT3D) to evaluate potential effects of solvent, petroleum hydrocarbons, insecticide and/or herbicide spillage in planned artificial recharge facility along the Santa Clara River in Ventura County, California.
- Finite element modeling (SEEP-2D) of groundwater seepage with respect to evaporation ponds for a proposed winery, San Luis Obispo County, California. Results were used to evaluate pond-sizing, potential effects of seepage with respect to the stability of nearby slopes, and to evaluate the volume of effluent that would reach the water table at that location.
- Finite element modeling (SEEP/W) of groundwater seepage with respect to mitigation and sludge reclamation for closure of the Manukau Wastewater Treatment Plant, New Zealand. Groundwater modeling was used to evaluate groundwater and surface water interactions and the associated volume and locations of potential seepage into the plant's evaporation ponds before and after reclamation.
- Provided technical oversight for finite element groundwater seepage modeling (SEEP/W) and hydrogeologic evaluation of tailings mitigation, Coeur Gold Golden Cross Mine Tailings Impoundment, New Zealand. Modeling was conducted to evaluate practicability of tailings dam dewatering schemes.
- Consultant to Mammoth Mountain Ski Area in a joint project with the Mammoth Community Water District regarding water resources issues associated with a proposed land transfer with the Inyo National Forest. Work involved developing conceptual model and associated preliminary numerical groundwater flow model of an eastern Sierra watershed, conducting field investigations to evaluate hydrogeologic parameters identified to be sensitive in the numerical model, and finalizing the numerical groundwater flow model through updating parameters and boundary conditions based on data obtained from the field investigations and performing a transient calibration. The final numerical model was used to evaluate potential groundwater impacts of the proposed project.
- Hydrogeologic consultant to the Tri-Valley Groundwater Management District (Chalfant, Hammil, and Benton Valleys), Mono County, California with respect to analyzing the potential impacts of a proposed groundwater export project by the USFilter Corporation. Work included field surveys/reconnaissance of existing groundwater conditions in the Tri-Valley area.
- Technical consultant to the Inyo County Water Department regarding a proposed groundwater export project by the Western Water Company in the Olancha area of Inyo County. Services primarily included providing technical oversight of aquifer testing activities conducted by Western Water's consultants.
- Groundwater modeling (MODFLOW) for the Harper Dry Lake Valley, San Bernardino County, California. Modeling was conducted for this Mojave Desert basin to evaluate the feasibility of developing a well field to support the construction of a proposed solar power facility.
- Groundwater flow modeling (MODFLOW), water-budget analysis, and water right vs. use analysis for the Lower Virgin River Valley, Spring Valley, and Cave Valley, Nevada. Investigations included development of recharge estimates for these valleys. Groundwater modeling associated with the Lower Virgin River Valley highlighted interactions between lowered groundwater levels along the Virgin River and associated decreases in river flow.
- Developed the methodology for the "Bishop Cone Audit," a surface water flow and usage auditing procedure being used by the County of Inyo and the Los Angeles Department of Water and Power as part of their long-term water management agreement. The audit determines surface water usage on lands owned by the City of Los Angeles, and derived from an extensive series of natural streams, canals and ditches within the Bishop, California area.
- Developed finite difference groundwater flow model (MODFLOW) to evaluate potential groundwater management activities including artificial groundwater recharge projects, future groundwater production well placement, and development of source water protection capture zones for the Murrieta County Water District, Murrieta, California.
- Developed finite-difference groundwater flow model (MODFLOW) to evaluate impacts of proposed groundwater pumping by the Owens Lake Soda Ash Company on nearby springs along Owens Lake, Inyo County, California.

Andrew Zdon, P.G., C.HG., C.E.G., R.E.A.

Education

B.S., Geology, Northern Arizona University, 1984.

Registrations/Certifications

State of California, Professional Geologist (No. 6006)
State of California, Certified Engineering Geologist (No. 1974)
State of California, Certified Hydrogeologist (No. 348)
State of California, Registered Environmental Assessor I (No. 07774)
State of Arizona, Registered Geologist (No. 33683)
American Institute of Professional Geologists, Certified Professional Geologist (No. 8773)

Professional Memberships

Southern Nevada Section Vice President (1998-1999), American Institute of Professional Geologists
Member of NGWA Monitoring Well Task Force (2001-2002), National Groundwater Association
Member, Groundwater Resources Association of California
Member, Nevada Water Resources Association

Awards

Received Certificate of Appreciation for services as subject matter expert provided to the Board.

California State Board of Registration for Geologists and Geophysicists, 2001. Received certificate of Commendation for services as subject matter expert provided to the Board.

California State Board of Registration for Geologists and Geophysicists, 2000. Received two certificates of Commendation for services as subject matter expert provided to the Board.

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